Bryan Ahearn
Tony Stiglich
Joseph Allen
Mapping Project
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Census Tract Boundaries-Wisconsin

Research Objective:

Our group decided to analyze the correlation between the change in housing price specifically median value for all owner occupied housing units and the change in median household income between 1990 and 2000 for the state of Wisconsin. Our original intention for this research objective was to obtain he data from Integrated Public Use Microdata Series (IPUMS-USA) which is a projected dedicated to collecting and distributing United States Census data. The goals of this organization are to: collect and preserve data and documentation, harmonize data, and disseminate the data absolutely free. The reason we originally chose to work with IPUMS was because it provided us with more recent data than the Census Bureau; however after struggling to extract the data we decided that we would be better off using the Census data even if it was outdated. Based on the variables we were looking at, we still felt that it would be an interesting question to further explore.

All the data used throughout this research was obtained from the Census Bureau website. Upon doing our research, we determined that analyzing

the data from a county level would not be as efficient as analyzing from a census tract level impart because it is a smaller scale than the county level, but it is larger than blocked groups; blocked groups would be too small to analyze a question of this matter for the whole state of Wisconsin. By using Census tracts it allows us to look at a specific defined area, ultimately making our research more efficient and accurate.

Question:

In what geographic areas of Wisconsin are the best values for homes based on change in median household income?

Hypothesis:

Before researching this topic, our group hypothesized that the geographic area within Wisconsin where home values are the best and median household income is average to above average would be within Ozaukee County; which includes the following cities: Bayside, Belgium, Cedarburg, Dacada, Fredonia, Grafton, Holy Cross, Knellsville, Lake Church, Lakefield, Little Kohler, Mequon, Newburg, Port Washington, Saukville, Thiensville, Ulao, Waubeka.

Data Sources:

Throughout research we used Census website exclusively to obtain the required data necessary to answer our question of what geographic area of Wisconsin had the best values for homes based on change in median household income. The data specifically obtained was the median value for all owner occupied unites and change in median household income from 1990 to 2000. The Census Bureau serves as the leading source of quality data about the nation's people and economy. We honor privacy, protect confidentiality, share our expertise globally, and conduct our work openly. We are guided on this mission by our strong and capable workforce, our readiness to innovate, and our abiding commitment to our customers (Census Bureau).

GIS Processing Steps:

Map Design Rationale: (Data Classification, Choice of Map Projections, and Color Scheme)

Our group chose to use a Choropleth map design for displaying our data in an accurate, yet easy to visualize way. A Choropleth map is a thematic map where areas of the map are shaded or patterned in proportion to the measurement of the statistical values being explained within the map. Our group felt that the Choropleth map provides an easy way to visualize how data varies across a geographic area, as well as the level of the variable within the region. Our group chose to classify the data by a “user-defined” classification method because it was most appropriate for our research objective. Additionally, this allows us to look at our specific data set, especially those that are negative values, which are important to our research objective. The class schemes our group used was natural breaks to portray the data at first, but then we changed it to “user-defined” to portray the areas where home values decreased between 1990 and 2000.